

REMARKS

Entry of this amendment and reconsideration of this application, as amended, are respectfully requested.

The amendments to the claims render the objection to the drawings moot.

Claims 1-7, 9-15 and 17-18 were rejected under 35 U.S.C. §103(a) for allegedly being unpatentable over Morrison, Lehan and Hughes. Claims 8 and 16 were rejected under the same statute over the foregoing combination in view of Tsukasa. Applicants respectfully traverse each of these rejections.

The Examiner again alleges that distance C is disclosed by Morrison; however, C is not disclosed by Morrison, because C is not the distance between the S pole and the N pole, but the distance between two long parts 16 and 17 of the plasma tube. This is not the same as the distance C. As can be seen from figures 1 and 3 of the present application, the plasma tube surrounds one pole and is arranged between the N pole and the S pole. Thus, C is not the distance between the S pole and the N pole.

Further, it is important that C is the distance between the two long parts of the plasma tube, because otherwise C cannot be compared with W, which has now been deleted from the claims. Such a comparison would not make sense and would not solve the problem of the invention because only the plasma can cause the erosion depression, not the distance between two poles. Thus, the plasma has to be considered, not the distance between two poles. Thus, Morrison neither discloses nor suggests the term "C", i.e. the distance between two long sides of the plasma tube.

Lehan discloses a plasma racetrack of a cylindrical magnetron (figure 1, page 2, lines 24 to 28; figures 2A to 2C; page 6, lines 26 to 31), not a planar magnetron. Thus, Lehan relates to a non-analogous art. The dimensions of the plasma tube are, therefore, totally different. Lehan simply

cannot be compared with the present application. Also, Lehan does not disclose a magnetron capable of moving linearly across a target distance.

Further, the cylindrical magnetron according to Lehan only rotates in one direction. The magnet system according to claim 1 of the present application changes its direction. There is no reason for a cylindrical magnetron to change the direction of its movement. A change of the direction of the rotation would mean that during the change of the direction the magnetron had to stay for a little while before it can move into the other direction. However, this exposure time causes problems.

To avoid those problems, a person skilled in the art had to either rotate the magnetron in one direction for a long time or rearrange the magnet system. This, however, involves an inventive step. Thus, the path (C formerly W) is also not disclosed or suggested by Lehan.

Hughes discloses a moving magnet assembly (24) and a plasma tube (50). However, a path corresponding to C and $B \leq d$ are not disclosed by Hughes because Hughes does not disclose any dimensions of the plasma tube (50). A combination of Morrison, Hughes and Lehan would not be obvious to a person skilled in the art because Lehan discloses plasma racetracks of a cylindrical magnetron.

Even if a person skilled in the art combined these three documents, the subject matter of claim 1 is not obvious, because a person skilled in the art would have to convert the dimensions of a plasma tube of a cylindrical magnetron to a plasma tube of a planar magnetron.

The subject matter of claim 2 is also not obvious to a person skilled in the art because none of the references cited by the examiner discloses or suggests the path (formerly "W") or terms "C", "B" and "d" or even the relationship between these terms. This is especially because Lehan refers to a plasma tube of a cylindrical magnetron.

Thus, reference is made to the argumentation concerning claim 1 as set forth above.
Thus, this rejection should be withdrawn.

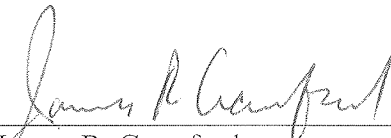
Tsukasa fails to remedy the deficiencies of the primary combination of references set forth above, so this rejection must also be withdrawn.

In view of the foregoing, allowance is respectfully requested.

Any fees due for entry of this amendment, or to otherwise maintain pendency of this application may be charged to deposit account no: 50-0624.

Respectfully submitted

FULBRIGHT & JAWORSKI L.L.P.

By 
James R. Crawford
Reg. No: 39,155

666 Fifth Avenue
New York, New York 10103
(212) 318-3148